

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A plasma surgical device for reducing bleeding in living tissue by means of a gas plasma, ~~comprising~~comprising:

 a plasma-generating system having an anode, a cathode and a gas supply channel for supplying gas to the plasma-generating system, the plasma-generating system ~~comprising~~having at least one electrode, which is arranged between said cathode and said anode, and the plasma-generating system being enclosed by a housing of an electrically conductive material, which is connected to the anode, wherein said housing forms said gas supply channel.

2. (Previously Presented) A plasma surgical device according to claim 1, in which said housing, in addition to said gas supply channel, forms at least one additional channel.

3. (Previously Presented) A plasma surgical device according to claim 2, in which said housing, in addition to said gas supply channel, forms at least two additional channels.

4. (Previously Presented) A plasma surgical device according to claim 3, in which said gas supply channel is arranged at the centre of the housing and the additional channels are arranged along the circumference of the gas supply channel.

5. (Previously Presented) A plasma surgical device according to claim 3, in which said additional channels are cooling channels for supplying and discharging a coolant.
6. (Previously Presented) A plasma surgical device according to claim 1, in which the housing forms a supply portion, in which said gas supply channel is formed, and a plasma-generating portion, in which said plasma-generating system is provided.
7. (Previously Presented) A plasma surgical device according to claim 1, in which said cathode is connected to a conductor for connection to a voltage source.
8. (Previously Presented) A plasma surgical device according to claim 7, in which said conductor is adapted to extend through one of the channels in said housing .
9. (Previously Presented) A plasma surgical device according to claim 8, in which the conductor extends through a gas supply channel arranged at the centre of said housing.
10. (Previously Presented) A plasma surgical device according to claim 1, in which said plasma-generating system comprises at least two electrodes, which are insulated from each other by an insulator.
11. (Previously Presented) A plasma surgical device according to claim 1, in which said at least one electrode is mounted in a holding means made of an electrically insulating material.

12. (Currently Amended) A plasma surgical device according to claim 11, in which said ~~electrodes, and an insulator if any, electrodes~~ are press fitted to said holding means.

13. (Previously Presented) A plasma surgical device according to claim 11, in which said cathode is arranged in the holding means concentrically with and spaced from an electrode closest to the cathode.

14. (Previously Presented) A plasma surgical device according to claim 13, in which said cathode is mounted in the holding means by means of a cathode holder, which is press fitted to the holding means.

15. (Previously Presented) A plasma surgical device according to claim 13, in which an insulating tube of a ceramic material is mounted on the inside of the holding means so as to enclose the cathode.

16. (Previously Presented) A plasma surgical device according to claim 13, in which the holding means has a connection end, which is connected to said gas supply channel, so that gas is passed through the holding means to the cathode and then through said at least one electrode towards the anode.

17. (Currently Amended) A plasma surgical device according to claim 16, in which the holding means has an outer shape such as to allow a fluid to flow respectively from and to the additional channels in a space formed between the holding means with said electrode, ~~and insulators if any, electrode~~ and the inner wall of the housing at the holding means.

18. (Previously Presented) A plasma surgical device according to claim 1, in which a gasket is arranged between the anode and the electrode closest to the anode, and the plasma-generating system is arranged in such manner in the housing that the anode is connected to the housing, a predetermined compressive force being applied to the gasket, so that a watertight seal is established between the housing and the anode and electrical contact therebetween is ensured.

19. (Previously Presented) A plasma surgical device according to claim 1, in which said housing is surrounded by a first contact ring in electrical contact therewith, which contact ring is connected to earth.

20. (Previously Presented) A plasma surgical device according to claim 19, in which said housing is surrounded by a second contact ring, which is capable of being used to constantly control the earthing of the housing.

21. (Previously Presented) A plasma surgical device according to claim 2, in which a connecting device is provided for connecting the gas supply to said gas supply channel and any desired function to said additional channels.

22. (Previously Presented) A plasma surgical device according to claim 21, in which said connecting device has an outlet end, which defines connecting channels for obtaining a fluidtight fit in said gas supply channel and additional channels, and an inlet end provided with hose couplings for connecting hoses to each of said connecting channels.

23. (Previously Presented) A plasma surgical device according to claim 21, in which said connecting device also has a conductor opening through which a cathode conductor extends for connection to a voltage source.

24. (Previously Presented) A plasma surgical device according to claim 2, in which said housing is connected to hoses for supplying gas and any desired function to the additional channels, which hoses are connected, at their other end, to a connector for connection to a supply unit.

25. (Previously Presented) A plasma surgical device according to claim 1, which comprises a handle portion that at least partially encloses said housing to allow easy handling of the device.

26. (Previously Presented) A plasma surgical device according to claim 20, which comprises a circuit adapted to distinguish the device type by means of the resistance of an indication component.

27. (Previously Presented) A plasma surgical device according to claim 1, which has a first button for switching the plasma generator on and off.

28. (Previously Presented) A plasma surgical device according to claim 27, which, for increased reliability, has a second button.

29. (New) A plasma surgical device according to claim 1, wherein said housing forms at least three additional channels, and one of said channels is a liquid sucking channel in which a liquid is sucked from an surgical site.